this building was contributed by: IBUS, Germany

Haus der Normung

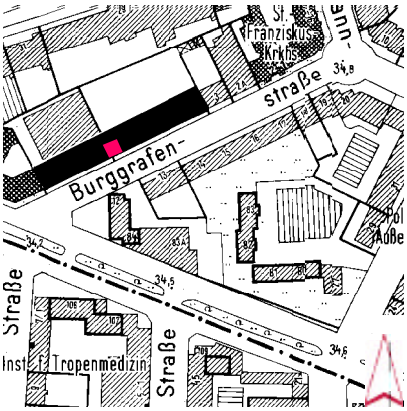
Berlin, Germany
52,5° N, 13,2° E
predominantly cloudy

office building

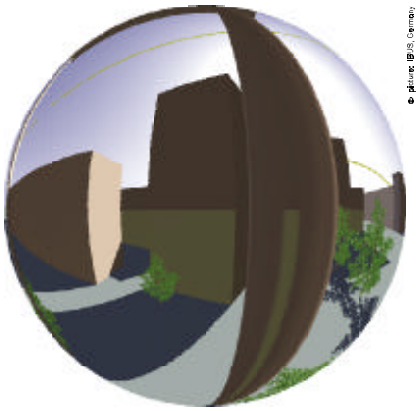
vertical division of the window, exterior sun shades, light diffusing glass

building

The DIN-Building is a typical beam shaped building of the 1960's. Two rows of cellular offices are accessed by two corridors, separated by a utility core containing stairs, toilets, elevators and service rooms. In 1992 a transept of three stories was added on top of the existing building.



The DIN-Building is situated in a heterogeneous urban environment.



A column which supports the extension of the building obstructs the window of the room recorded.

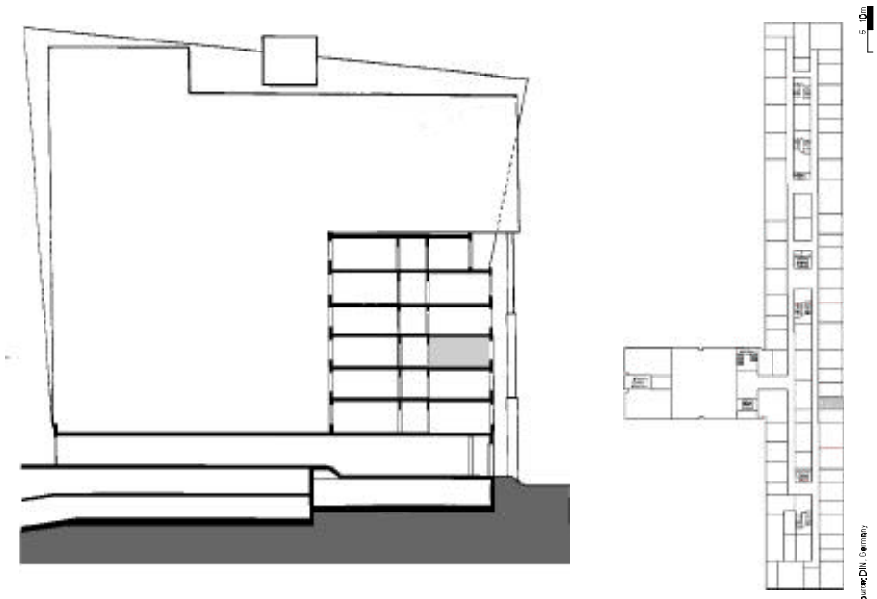
daylight strategy

The daylight strategy of the DIN-Building is limited to the offices, although the corridors receive some daylight from clerestory windows in the partition walls. The facade openings consist of a lower window with clear glass, shaded by a fixed inclined exterior sun shade, and an upper window glazed with light diffusing glass. When the translucent glazing is hit by direct sunlight, high luminance tends to cause glare. Consequently interior blinds have been added to screen the entire window, thus disabling the daylight diffusing device.

Facade of the DIN-Building, view from the Burggrafenstraße. The design concept of the old building part attempted to close the front of the street.

office

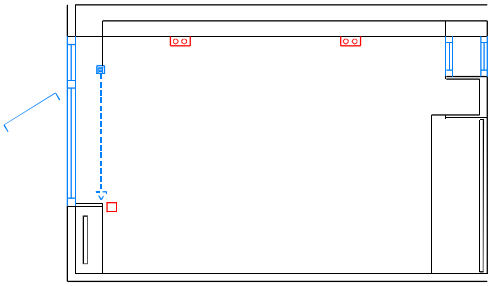
The offices are only 4,1 m deep and typically occupied by one person. They are naturally ventilated, with all the wiring and heating placed below the window sill. Users have criticized the changes between natural and artificial light during partly cloudy days when daylight fluctuation is rather extreme.



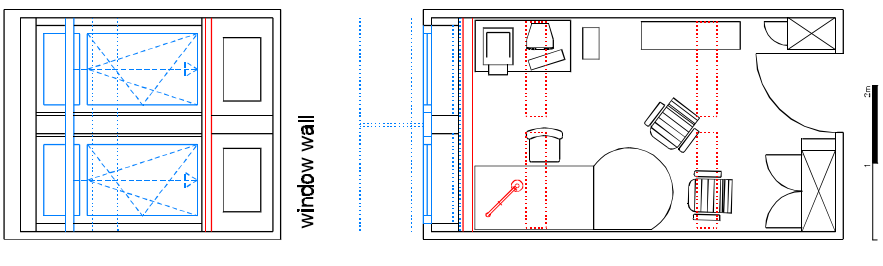
Left side: the cross-section shows an extension which was constructed above the existing building, right side: Floorplan of the 3rd story of the DIN-Building

Interior view of the office recorded, the exterior fixed shading device does not screen the upper part of the window. Interior blinds have been retrofitted to protect the user from glare.

Detail of the window system. When the translucent glass in the top of the window is hit by direct sunlight it becomes very bright and may cause glare.



cross-section



plan

building data	
size	16,300 m²
number of stories	6
architect	Plarre (old part)
year of completion	1966

office room	
daylight strategy	unilateral, sidelighting
dimensions (depth/width/height)	5,2 m / 2,7 m / 3,0 m
room area	14,1 m²
floor	carpet, 30%
wall	white paint, 70%
door	gray paint, 50%
ceiling	fiber board, 70%
table	plastic coating, 24%
facade, lower window	double clear glazing
facade, upper window	double light diffusing glazing
corridor facing window	double wired glazing
lamp types	fluorescent lamps
installed power density	20 W/m²
control strategy	manual switching

facade		south facade	corridor facing windows
data	orientation	157 °	337 °
	glazed area	3,4 m²	1,0 m²
	opening index	0,41	0,12
function	daylighting	●	-
	view outside	●	-
	ventilation	●	-
	operable	●	-
	shading	●	-
	redirection	●	-

systems		lightshelf	light-diff. glazing	interior blinds	none
function	sun shading	●	○	●	
	glare protection	○	○	●	
	redirection	○	●	-	
location	inside	○	○	●	
	window pane	○	●	-	
	outside	●	○	-	
	movable	-	○	●	
	fixed	●	●	-	